

Title (en)

ARTICLES OF CLOTHING AND PERSONAL GEAR WITH ON- DEMAND POWER SUPPLY FOR ELECTRICAL DEVICES

Title (de)

BEKLEIDUNGSARTIKEL UND PERSÖNLICHE SACHEN MIT BEDARFSGESTEUERTER STROMVERSORGUNG FÜR ELEKTRISCHE EINRICHTUNGEN

Title (fr)

ARTICLES VESTIMENTAIRES ET EQUIPEMENT PERSONNEL AVEC ALIMENTATION A LA DEMANDE POUR DISPOSITIFS ELECTRIQUES

Publication

EP 1756903 A4 20090401 (EN)

Application

EP 05745146 A 20050506

Priority

- US 2005016256 W 20050506
- US 56934004 P 20040507

Abstract (en)

[origin: US2005255349A1] An article of clothing with an on-demand power supply for electrical devices is provided. The power supply includes stiff planar fuel cell devices that are distributed in a plane. The number of fuel cells is dependent on the power requirements for the electrical devices. The planar stiff fuel cells are flexibly interconnected in the plane by a flexible interconnecting means, which allows the fuel cells to move with respect to each other out of the plane. This further allows the power supply to be nicely integrated in an article of clothing and minimizes negative impact to a body region or to the article of clothing. The electrical and fuel connections between the fuel cells are integrated with the flexible interconnecting means. To further integrate and increase ease of operation a control system is included to control the on-demand power supply or control power levels for the electrical device.

IPC 8 full level

H01M 8/00 (2006.01); **A61F 7/00** (2006.01); **A61F 7/02** (2006.01); **A61F 7/03** (2006.01); **A61F 7/12** (2006.01); **H01M 8/10** (2006.01); **H01M 8/24** (2006.01)

CPC (source: EP US)

A61F 7/007 (2013.01 - EP US); **A61F 7/03** (2013.01 - EP US); **H01M 8/006** (2013.01 - EP US); **H01M 8/2404** (2016.02 - EP); **H01M 8/241** (2013.01 - EP); **H01M 8/2475** (2013.01 - EP US); **H01M 8/2483** (2016.02 - EP US); **H01M 8/249** (2013.01 - EP US); **A61F 2007/0001** (2013.01 - EP US); **A61F 2007/0094** (2013.01 - EP US); **A61F 2007/0233** (2013.01 - EP US); **H01M 2250/30** (2013.01 - EP US); **Y02B 90/10** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP); **Y10S 2/905** (2013.01 - US)

Citation (search report)

- [X] US 2004062978 A1 20040401 - YAZICI MEHMET SUHA [US]
- [XY] US 2004048135 A1 20040311 - HARTNACK HERBERT [DE], et al
- [XY] WO 02097911 A2 20021205 - HEWLETT PACKARD CO [US]
- [Y] DE 10148821 A1 20030430 - SURMUND BENEDIKT [DE]
- [Y] FR 2823047 A1 20021004 - TUCHERER LAURENT [FR]
- [Y] US 6045575 A 20000404 - ROSEN DANIELLE [US], et al
- [Y] US 4827534 A 19890509 - HAUGEN ALVIN E [US]
- [Y] WO 9516948 A1 19950622 - CARROLL DAVID W [US]
- [A] EP 1001666 A2 20000517 - BALLARD POWER SYSTEMS [CA]
- See references of WO 2005112179A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

US 2005255349 A1 20051117; **US 8062797 B2 20111122**; EP 1746957 A2 20070131; EP 1746957 A4 20090401; EP 1756903 A2 20070228; EP 1756903 A4 20090401; JP 2007536015 A 20071213; JP 2007536711 A 20071213; US 2005256555 A1 20051117; US 7637263 B2 20091229; WO 2005110299 A2 20051124; WO 2005110299 A3 20070111; WO 2005112179 A2 20051124; WO 2005112179 A3 20070419

DOCDB simple family (application)

US 12440105 A 20050506; EP 05745146 A 20050506; EP 05746718 A 20050506; JP 2007511660 A 20050506; JP 2007511716 A 20050506; US 12383805 A 20050506; US 2005015953 W 20050506; US 2005016256 W 20050506